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**NATIONAL DEFENSE UNIVERSITY**  
**JOINT FORCES STAFF COLLEGE**  
**JOINT ADVANCED WARFIGHTING SCHOOL**



**The Joint Master Operational Planner**

**by**

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The Joint Master Operational Planner

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A paper submitted to the Faculty of the Joint Advanced Warfighting School in partial satisfaction of the requirements of a Master of Science Degree in Joint Campaign Planning and Strategy. The contents of this paper reflect my own personal views and are not necessarily endorsed by the Joint Forces Staff College or the department of Defense.


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## **Abstract**

The global environment is one that is increasing in complexity and instability. Conventional warfare, superpower adversaries, and the potential for nuclear war characterized the Cold War, and the modern era of warfare. After the Cold War, the post-modern era began, and with it a new type of warfare. Weakened state actors and strengthened non-state actors complicate warfare in the post-modern era. This situation is causing a power shift away from the state and towards non-state actors, resulting in adversaries that are less state or state-sponsored, and more non-state actors such as opportunists, privateers, cartels, and criminal organizations. Competition for scarce resources and a continued inability for states to provide security within their borders will further complicate this situation and make the strategic-operational environment one that is increasingly volatile and uncertain. The United States struggled to appreciate this change in the environment and warfare in Iraq and Afghanistan, resulting in failure to enact properly designed and adaptive strategies. To prevent future failures and ensure U.S. strategic interests are preserved, the Department of Defense must make changes in current officer professional military education to develop a core population of elite strategic thinkers and operational artists. This thesis proposes such a program, called the Joint Master Operational Planner Program, that will produce planners that are able to understand the strategic-operational environment, properly advise commanders, and devise effective campaign and operational plans at the Combatant Command level.

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## **Introduction**

In a global environment presenting significant strategic challenges, Combatant Commands are required to develop coherent, complete, and executable plans.<sup>1</sup> These plans demand a level of sophistication unmatched in previous years. The post-Cold War strategic conditions depend on a much more sophisticated approach to developing solutions to complex problems. It is essential that planners possess a thorough and accurate understanding of the environment in which joint forces are operating. Planners serve not only as advisors to commanders at the Combatant Command (CCMD) and the Joint Task Force (JTF) levels, they produce executable operational level plans that match the environment, are realistic and achievable, and result in desirable strategic-operational outcomes.

Current operational level planners possess great talent and commitment to the mission; however, their professional military education did not provide them with the skills necessary to develop a deep and broad appreciation of the operational environment and comprehension of the many different processes to solve problems. Most lack the ability to think strategically, develop a thorough understanding of complex environments, and apply forces and functions effectively within these environments. These planners are as much in the dark as their commanders. Neither helps the other. The result is the most obvious unimaginative approach that almost always leads to stalemate at the best, and defeat and withdrawal at the worst.

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<sup>1</sup> Congressional Research Service, *The Unified Command Plan and Combatant Commands: Background and Issues for Congress, United States Congress*, January, 2013 (Washington, DC: Government Printing Office, 2013), 1-2.



Service Professional Military Education (PME) systems provide for the basic educational requirements for officers to continue to advance to the next grade or next assignment.<sup>2</sup> While it provides education in thinking, problem solving, and planning, service PME does not focus on the task of producing exceptional operational planners. The service schools that are dedicated to producing planners lack a true joint focus, and graduates normally serve in planning positions within their parent service, with only some placed in joint planning positions. Additionally, all dedicated planning schools lack a meaningful joint practicum.

Likewise, the Joint Professional Military Education (JPME) program outlines the basic educational requirements prescribed for Joint Officer Development (JOD) and for joint qualification. It also does not focus solely on producing effective joint planners.<sup>3</sup> The Joint Advanced Warfighting School (JAWS) Senior Service College (SSC) does focus on producing joint operational planners. While JAWS fills the operational level planner need, they do not contain within the curriculum a joint practicum and there are no prerequisites or credentials required for attendance outside of those for any SSC. The result is senior officers attend school for one year, and upon graduation, supposedly possess all the tools necessary to optimally fill a joint planner position. But JAWS, like all PME, is a generalist course, based on the premise that the best students will rise to the top, having somehow gained greater insight and skills than the average graduate. In today's global complex environment, more is necessary to prepare officers for this important duty.

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<sup>2</sup> U.S. Joint Chiefs of Staff, J7, *CJSI 1800.01E: Officer Professional Military Education Policy*, 29 May 2015, (Washington DC: Joint Chiefs of Staff), A-A-6 – A-A-8.

<sup>3</sup> Ibid., A-1 – A-2.

CCMDs and JTFs require joint master operational planners that are the product of a program to develop them throughout their careers to meet the planning challenges of the future. As environments grow more complex, the only way CCMDs will keep pace are through planners who enable commanders to understand the strategic-operational environment and make sound decisions. Current PME and JPME systems attempt to keep pace, but Officer Professional Military Education Policy (OPMEP) requirements, available time, and a fixed system of ten to eleven month schools, focused on rank, all serve to constrain the ability to produce effective thinkers and planners. In an age of globalization, multi-polarity, hybrid warfare, and weak central governments, commanders and their planners must have all the tools necessary to avoid operational missteps and not imperil the security of the nation.<sup>4</sup> It is time to provide CCMDs with planners immersed in planning and joint environments early in their career, and further developed in both experience and education throughout their career, to meet the demands of the future.

### **Growing Complexity**

“The idea of the future being different from the present is so repugnant to our conventional modes of thought and behavior that we, most of us, offer a great resistance to acting on it in practice.”<sup>5</sup> – John Maynard Keynes, 1939.

American political leaders, and even many senior military leaders, declare that the U.S. has the strongest, most lethal, and most professional military force in existence, and perhaps the

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<sup>4</sup> Hybrid warfare is a type of warfare widely understood to blend conventional and unconventional, regular and irregular, and information and cyber warfare. (Dr. Damien Van Puyvelde, “Hybrid War – Does it Even Exist?,” *NATO Review Magazine*, 05 July 2015, <http://www.nato.int/docu/Review/2015/Also-in-2015/hybrid-modern-future-warfare-russia-ukraine/EN/index.htm> (accessed 21 January 2016).)

<sup>5</sup> Joel K. Bourne Jr, *The End of Plenty: the Race to Feed a Crowded World* (New York: W. W. Norton & Company, 2015), Chapter 7.

strongest force the world has ever known.<sup>6</sup> It may be true, but it is also increasingly irrelevant. The reason for this growing irrelevancy is a failure to acknowledge that the conduct of warfare is changing while strategic-operational thinking remains blissfully stuck in the modern era of war. Instead of adapting organizations and thinking to take on the challenges of the post-modern era, military and political leaders remain in a false comfort zone.<sup>7</sup>

There are many high-ranking officials and service members that will not acknowledge a growing complexity in today's global environment. In testimony to the Senate Armed Services Committee covering the topic of defense reform, former Secretary of Defense Robert Gates stated:

First, while it is tempting – and conventional wisdom – to assert that the challenges facing the United States internationally have never been more numerous or complex, the reality is that turbulent, unstable, and unpredictable times have recurred to challenge U.S. leaders regularly since World War II... The frequent crises during the 1950s including the Korean War, regular confrontations with China over Taiwan, pressures from the Joint Chiefs of Staff to help France by using nuclear weapons in Indochina, war in the Middle East, uprisings in Eastern Europe and a revolution in Cuba. During the 1960s the war in Vietnam, another Arab-Israeli war and confrontations with the Soviets from Berlin to Cuba. In the 1970s, Soviet assertiveness in Africa and their invasion of Afghanistan, yet another Arab-Israeli war, and oil embargoes. The 1980s brought a number of surrogate conflicts in places like Afghanistan, an attack on Libya, crises in Lebanon and the intervention in Panama; and the 1990s the first Gulf War, military action in the Balkans, Somalia, Haiti, Missile attacks on Iraq, and the first Al Qaeda attacks on the U.S.

The point of recounting these historical examples is that Americans, including all too often our leaders, regard international crises and military conflict as aberrations when, in fact and sad to say, they are the norm.<sup>8</sup>

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<sup>6</sup> Gregg Easterbrook, "The World: Out on the Edge; American Power Moves Beyond the Mere Super," *The New York Times*, April 27, 2003.

<sup>7</sup> Philip Bobbitt, *Terror and Consent: the Wars for the Twenty-First Century*, Reprint ed. (New York: Anchor, 2009), 172-173.

<sup>8</sup> Robert Gates, Global Challenges: U.S. National Security Strategy, and Defense Organization, Testimony before the Senate Armed Services Committee, October 21, 2015.

Mr. Gates' comments are an excellent reflection of modern era thought. Mr. Gates was quite correct stating that military conflicts are the norm. However, he failed to recognize the conduct of military conflicts and the actors engaging in conflicts have changed. The world has entered a condition of perpetual conflict, often existing outside of the capabilities of the state to control.<sup>9</sup>

## THE MODERN ERA

The modern era began with the rise of nation states in Europe and the end of feudalism following the conclusion of the Thirty Years War. The Peace of Westphalia in 1648 most prominently marks it in history.<sup>10</sup> The defining feature of the modern era is the Westphalian system of states that defined the interplay of politics and extension of politics by other means, namely, war.<sup>11</sup>

The modern era provided structure to war. It did so by establishing rules, or generally acceptable practices in the conduct of war. Some of these practices were formalized, such as in the Geneva Convention, or the Law of Armed Conflict.<sup>12</sup> Other practices included the wear of uniforms to distinguish friend from enemy, deployment of large troop formations, and well defined fields of battle.<sup>13</sup>

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<sup>9</sup> James J. Hentz, ed., *Routledge Handbook of African Security* (London: Routledge, 2013), 114.

<sup>10</sup> Benjamin Straumann, "The Peace of Westphalia as a Secular Constitution," *Constellations* 15, no. 2 (2008): 173-174.

<sup>11</sup> Carl von Clausewitz, *On War*, trans. J. J. Graham (United States of America: Enhanced Media Publishing, 2014), 30.

<sup>12</sup> Sibylle Scheipers, "Fighting Irregular Forces: Is the Law of Armed Conflict Outdated?" *Parameters* 43, no. 4 (Winter 2013-2014): 45-46.

<sup>13</sup> Toni Pfanner, "Military Uniforms and the Law of War," *International Review of the Red Cross (IRRC)* Vol. 86, no. 853 (March 2004): 98-99.; Martin van Creveld, *Technology and War: from 2000 B.C. to the Present*, (New York: Touchstone, 1991), 92-95.

The modern era gave rise to mass armies and rigid organizational hierarchies, to include rank structure. The armies deployed, particularly in the first half of the 20<sup>th</sup> century, over expansive areas of land; enemy force countering enemy force on a field of battle. This era also brought mass casualties as strategies of annihilation took hold during the world wars, and nations poured all necessary men and materiel into the fight to execute total war.<sup>14</sup> These mass armies enjoyed the fruits of technological innovations that introduced the use of railways, high-powered rifles, the machine gun, the airplane, tanks, and the atomic bomb.<sup>15</sup> These technological innovations, and the people's will to spend resources to attain them, spread battlefields over vast areas and made strategies of annihilation almost inevitable.<sup>16</sup>

To compete, nations built their armies to counter their foe's capabilities, or they built an army that, when allied with other nations, were capable of countering their foe.<sup>17</sup> This competition included the careful study of the tactics of the opponent. Knowing an adversary's military organization, technology, manning, training, education, and weapons all provided important information about how to defeat an enemy through a rational calculation of known strengths and weaknesses.<sup>18</sup>

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<sup>14</sup> Stig Förster and Jorg Nagler, eds., *On the Road to Total War: the American Civil War and the German Wars of Unification, 1861-1871* (New York: Cambridge University Press, 2002), 521.

<sup>15</sup> Jeremy Black, *The Age of Total War, 1860-1945*, (Westport, Conn.: Praeger Security International, 2006), 32-33, 82-83, 85-87, 160-163.

<sup>16</sup> H. Heer and K. Naumann, eds., *War of Extermination: the German Military in World War II*, (New York: Berghahn Books, 2004), 30. The authors relate technology to annihilation by suggesting: "The concept of 'total war' is a radicalization of the concept of the war of annihilation. It is a result of World War I, and not at all limited to Germany. It can be regarded as an obvious consequence of the influence of advanced technology on the national economy, and that view is not entirely false. Yet it is also true that war technology would never have experienced this rapid development if there had not been a nationwide readiness to finance it."

<sup>17</sup> Charles E. Kirkpatrick, *Defense of the Americas*, (Washington DC: U.S. Army Center for Military History, 2015), 30.

<sup>18</sup> Air Force History and Museums Program, *Piercing the Fog: Intelligence and Army Air Forces Operations in World War II* (N.P.: Military Bookshop, 2013), 57.

The role of non-combatants changed in the modern era, essentially serving as the sinews of total war, producing the means to sustain a nation in arms. Because non-combatants became so important to the war effort, they too, became legitimate military targets. This was particularly the case with nuclear weapons. Nuclear capability provided the ability to destroy vast materiel and significant portions of civilian populations at the same time.<sup>19</sup>

The Soviet Union's inevitable development of the atomic bomb solidified the Cold War and introduced nuclear strategy and nuclear deterrence. The Cold War brought a period of confrontation between Western nations and the Soviet Union that began at the conclusion of World War II. Limited by the danger of nuclear annihilation, covert operations, spying, proxy wars and small wars characterized the Cold War.<sup>20</sup> The bipolar world order placed weaker states under the oversight of one superpower or the other. Neutral or non-aligned states operated on the margins of the superpower competition.<sup>21</sup> The dissolution of the Soviet Union in 1991 marked a major milestone in world history. The West looked forward to enjoying a peace dividend and prosperity as globalization took the world into a new dimension of inter-connectedness.<sup>22</sup>

## THE POST-MODERN ERA

The disintegration of the Soviet Union in 1991 ushered in a time marked by the inability of states to control the territory, resources, and people within a nation state's borders and also

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<sup>19</sup> Martin van Creveld, *The Transformation of War* (New York: Free Press; 1991), 225.

<sup>20</sup> Emile Simpson, *War from the Ground Up: Twenty-First Century Combat as Politics*, (New York: Columbia University Press, 2012), 26.

<sup>21</sup> Nigel Thalakada, *Unipolarity and the Evolution of America's Cold War alliances* (Houndmills, Basingstoke, Hampshire: Palgrave Macmillan, 2012), 17-19.

<sup>22</sup> Norrin M. Ripsman and T V. Paul, *Globalization and the National Security State* (New York: Oxford University Press, 2010), 42.

characterizes warfare in the post-modern era. It is this loss of control, this state of anarchy or semi-anarchy, which sets the conditions for new actors to grab hold of power, and exert non-state authority over territory, resources, and people on their own terms using their own chosen methods.<sup>23</sup>

Today, the Westphalian nation state concept is struggling to stay relevant, as nation-states are no longer the exclusive actors in the international system. Non-state actors are taking power and exerting power among the people. As the nation-state's power crumbles, their authority diminishes, and government leaders centralize what power they can cling to so they can remain in position.<sup>24</sup> This is due, in part, to a weakened identity between the state and the state's people. Many citizens in weak nation-state environments identify themselves with religion, tribe, family, and other ideologies over identifying themselves with their state.<sup>25</sup> The perception of illegitimate governments and corrupt government leadership fan the flame of this loss of control.

This phenomenon exists most prominently in the continent of Africa and in the Middle East where central governments cede control of large parts of the state's territory to warlords, criminals, privateers, opportunists, and terrorists that use violence to ensure their control and exert power over the people.<sup>26</sup> In many areas, states struggle to exercise even nominal power within their borders, and the people see the government as an entity that seeks only to keep itself in existence while groups of violent non-state actors operate with impunity in ungoverned spaces.<sup>27</sup> In the words of new wars theorist, Mary Kaldor, "All these groups feed, like vultures, on the

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<sup>23</sup> Herfried Münkler, *The New Wars* (Cambridge, UK.: Polity, 2004), 16-18.

<sup>24</sup> Robert D. Kaplan, "The Coming Anarchy," *The Atlantic*, February, 1994, 4-5.  
[www.theatlantic.com/magazine/archive/1994/02/the-coming-anarchy/304670/](http://www.theatlantic.com/magazine/archive/1994/02/the-coming-anarchy/304670/) (accessed November 15, 2015).

<sup>25</sup> *Ibid.*, 10.

<sup>26</sup> *Ibid.*, 36-37.

<sup>27</sup> Hentz, *Routledge Handbook of African Security*, 114.

remnants of the disintegrating state and on the frustrations and resentments of the poor and unemployed.”<sup>28</sup> Regions where states no longer hold the monopoly for armed violence hold the most potential to experience expansive instability and state collapse.<sup>29</sup> These regions also make clear a prominent Clausewitzian idea; that conflict and war remain a contest of wills among people.<sup>30</sup>

The lack of central government control and filling of power vacuums by non-state actors change who the belligerents are, and how they conduct warfare, in the post-modern era. There is little to no structure of warfare. The post-modern belligerent is far more complicated than the classical state adversary. Laws, treaties, and international organizations became increasingly meaningless.<sup>31</sup> The non-state adversary publishes little doctrine, is difficult to detect using current means such as satellite and ground movement tracking systems, and the tactics used will vary wildly based on available means. Belligerents construct and enforce their own rules of warfare to meet their goals.<sup>32</sup> There is only loose command structures among belligerents that are “rhizomatic” in their organization.<sup>33</sup> Some parts of their organization are visible while the rest remain underground, able to regenerate when something eradicates visible parts.<sup>34</sup>

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<sup>28</sup> Mary Kaldor, *New and Old Wars: Organized Violence in a Global Era, Third Edition*, 3 ed. (Palo Alto: Stanford University Press, 2012), 87.

<sup>29</sup> van Creveld, *Transformation of War*, 59.

<sup>30</sup> von Clausewitz, 14.

<sup>31</sup> Münkler, 21.

<sup>32</sup> *Ibid.*, 20-21.

<sup>33</sup> Rupert Smith. *The Utility of Force: The Art of War in the Modern World*. (New York: Knopf, 2007), 226. Rupert Smith uses a botanical analogy to describe the nervous system of the new enemy operating in today’s environment. He continues his description of a rhizomatic nervous system saying, “Rhizomatic plants can propagate themselves through their roots; nettles, brambles and most grasses do this. They can increase by spreading fertilized seed, or vegetatively through their root systems, even when the root is severed from the parent body. This allows the plant to survive a bad season or seasons and the disturbance of the soil.”

<sup>34</sup> *Ibid.*



The age of mass armies maneuvering on a field of battle are over. In the post-modern era, participants in warfare against states will fight in small groups, in a much more decentralized fashion. Leaders of these small groups, that will vary in number based on their organization and support, articulate broad goals to achieve limited objectives. There is no plan for battle, there is limited maneuver, and there is no strict sequencing of operations.<sup>35</sup> Their goal is to avoid direct confrontation given the numerical, materiel, and technological advantages of state-sponsored forces.<sup>36</sup> They intend to fight with the minimum number of people, using the least amount of materiel, while leveraging simple technological solutions to inflict maximum casualties, cause disruption, and fulfill limited objectives.<sup>37</sup> To understand the post-modern non-state adversary means to have an understanding of culture, religion, tribe, family, politics, financing, rhizomatic organization, geography, affiliations, and all of the systems that allow the adversary to operate.<sup>38</sup>

Today, non-combatants have become the battlefield. The people are both the source and the objective of violence; they are the essential resource on today's battlefield. They simultaneously are the obstacles, financiers, facilitators, participants, and victims.<sup>39</sup> As states experience an increasing inability to provide security and borders become more porous, human security will dominate the actions of both states and non-states.<sup>40</sup>

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<sup>35</sup> Ibid.

<sup>36</sup> Münkler, 12.

<sup>37</sup> van Creveld, *Transformation of War*, 260-263.

<sup>38</sup> Smith, 226.

<sup>39</sup> Ibid.

<sup>40</sup> Kaldor, 124-125.

## GLOBAL REALITIES

Increasing instability characterizes the post-modern era, creating conditions ripe for conflict. Shortages of resources such as fresh water, food, and energy will cause increased competition among both state and non-state actors. A soaring population will increase demand. By 2030, the global population will expand by over 1 billion people. Also by 2030, global demand for water will grow by 40 percent, demand for food will grow by 35 percent, and demand for energy will grow by 50 percent. Two things complicate these expanding needs. First, water, food, and energy form a nexus, meaning that consumers cannot meet demand for one commodity without affecting the supply and availability for the other. Secondly, climate change will affect how the global economy meets demands for these commodities.<sup>41</sup> This nexus is especially evident in the Middle East and Africa, places where weak governments abound and where tens of thousands of people are migrating into the cities. Environmental factors are a growing concern as reflected in the 2015 National Security Strategy that conflicts over basic resources like food and water are a growing threat to national security.<sup>42</sup> Given these factors, conflict is a near certainty.

It is when central governments lose control of small parts, or large swathes of their territory, that the vultures swoop in to consume, and the cost is high.<sup>43</sup> The human cost is genocide, mass refugees, mass migration and immigration, starvation, and unbridled spread of disease. The political cost is loss of economy, legitimacy, often times brutality against the people, and a growing dependence on the international community for survival.<sup>44</sup>

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<sup>41</sup> Mathew Burrows, *Global Trends 2030: Alternative Worlds* (Washington, DC: National Intelligence Council, 2012), iv.

<sup>42</sup> Barack Obama. *National Security Strategy* (Washington DC: Government Printing Office, February 2015), 12.

<sup>43</sup> Kaldor, 87.

<sup>44</sup> Münkler, 13-14.

What has not changed is partly what Mr. Gates described. Nation-state competition will continue amidst the conditions described above. One difference is that nation-states will use post-modern war tactics to achieve their goals under the unspoken shield of the nuclear weapon threat, as seen by Russia many times in the recent past, most recently in Crimea and the Ukraine.<sup>45</sup> Nuclear weapon deterrence is a powerful security guarantee against conventional attacks from other nations, a prominent reason North Korea fought so hard to achieve this capability and why Iran is doing so in kind.<sup>46</sup> The shield of nuclear weapon capability puts downward pressure against total wars, and upward pressure on proxy and small wars. Nations with nuclear capability will not face each other on the conventional battlefield for fear of nuclear retaliation resulting in virtual suicide.<sup>47</sup> This greatly contributes to the likelihood that future conflict in the world will resemble those observed in the post-modern era.

### **Capability vs. Task Mismatch**

Our war colleges do a capable job at the mission of broadly educating senior officers at the O-5 and O-6 level, even as they help create a network of foreign officers who have been exposed to our system. But they do not create an elite cadre of strategic thinkers and planners from all the services and the civilian world.<sup>48</sup> – Eliot A. Cohen

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<sup>45</sup> Michael Birnbaum and Karoun Demirjian, “A Year After Crimean Annexation, Threat of Conflict Remains,” *The Washington Post*, 18 March, 2015.

<sup>46</sup> Joel S. Wit, “How ‘Crazy’ Are the North Koreans?,” *The New York Times*, 09 January 2016.

<sup>47</sup> van Creveld, *Transformation of War*, 225.

<sup>48</sup> Eliot Cohen, Global Challenges: U.S. National Security Strategy, and Defense Organization, Testimony before the Senate Armed Services Committee, October 22, 2015. Eliot A. Cohen is a Robert E. Osgood Professor of Strategic Studies at Johns Hopkins SAIS. In addition to having taught at Harvard University and the Naval War College, he has served in various government positions including as Counselor of the Department of State, 2007-2009.

## WHERE WE HAVE FAILED

In the post-modern period the United States has engaged in a variety of military operations, many of them characterized by rapid military dominance in the short term, followed by a declining capability to achieve its long-term goals. Lack of understanding how operations affected the strategic operational-environment, and lacking training and doctrine in how to operate in the environment, stood as immediate obstacles to achieve operational objectives.<sup>49</sup> This phenomenon was particularly evident in OPERATION IRAQI FREEDOM (OIF) and OPERATION ENDURING FREEDOM in Afghanistan.

The dichotomy between tactical-operational success and strategic failure is largely due to a lack of a true understanding of the strategic-operational environment. This lack of understanding led to flawed strategy and incomplete campaign plans. A symptom of this was the focus on an enemy framed in a Cold War context divorced from the realities of the strategic-operational environment. Mary Kaldor described this myopia in her critique of the Bush administration:

Bush and Rumsfeld's conception of a new war, it can be argued, was more like an updated version of old war, making use of new technology. The failure by the United States to understand the reality on the ground in both Afghanistan and Iraq and the tendency to impose its own view of what war should be like has been immensely dangerous. It has fomented real new wars and it carries the risk of being self-perpetuating.<sup>50</sup>

We are witnessing the development of self-perpetuating conflicts and wars today as a result of a lack of understanding of the strategic-operational environment.

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<sup>49</sup> John Andreas Olsen and Martin van Creveld, eds., *The Evolution of Operational Art: from Napoleon to the Present* (New York: Oxford University Press, 2011), 159.

<sup>50</sup> Kaldor, 152.

A study titled “Decade of War,” ordered by the Chairman of the Joint Chiefs of Staff, General Martin Dempsey, analyzed U.S. operations since 2003 to identify lessons learned.<sup>51</sup> The report states, “In operations in Iraq, Afghanistan, and elsewhere, a failure to recognize, acknowledge, and accurately define the operational environment led to a mismatch between forces, capabilities, missions, and goals.” It further states that, “the U.S. government’s approach often did not reflect the actual operational environment,” and, “the operational environment encompasses not only the threat but also the physical, information, social, cultural, religious, and economic elements of the environment.”<sup>52</sup>

In Iraq, lack of understanding the strategic-operational environment led to a failure to anticipate active resistance following the fall of Saddam Hussein, let alone the rise of multiple insurgencies.<sup>53</sup> The unanticipated insurgencies, and the inability of the coalition to address the realities of the strategic conditions in Iraq and the greater Middle East, resulted in marginal success and led to a metastasized conflict now engulfing Syria.<sup>54</sup> In Afghanistan, the strategy was one of minimal resources to accomplish vast goals combined with a complete misunderstanding of Afghanistan’s culture, politics, and governance. It was a misunderstanding of the environment, and what was required to make changes in that environment, that influenced leaders to cling to a

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<sup>51</sup> U.S. Joint Chiefs of Staff, *Joint and Coalition Operational Analysis, Decade of War*, Volume 1. Enduring Lessons from the Past Decade of Operations, Joint Staff J7 JCOA Division (Washington DC: Joint Chiefs of Staff, June 15, 2012), v. In October 2011, General Martin Dempsey, Chairman of the Joint Chiefs of Staff, issued a task to “make sure we actually learn the lessons from the last decade of war.” In response, the Joint and Coalition Operational Analysis (JCOA) division reviewed 46 lessons learned studies conducted from 2003 to the present, and synthesized the studies’ 400+ findings, observations, and best practices into the 11 strategic themes described in the report.

<sup>52</sup> *Ibid.*, 3.

<sup>53</sup> Bruce Hoffman, *Insurgency and Counterinsurgency in Iraq*, (Santa Monica, Calif.: The RAND Corporation, June, 2004), 3.

<sup>54</sup> David Ignatius, “How ISIS Spread in the Middle East,” *The Atlantic*, 29 October 2015. <http://www.theatlantic.com/international/archive/2015/10/how-isis-started-syria-iraq/412042/> (accessed 20 January 2016).

strategy that died a “slow death” and continues to slowly fade away two years after NATO indicated it would withdraw troops in 2014.<sup>55</sup>

Despite the investment of blood and treasure into operations in Iraq, Iran has more influence in Baghdad than the U.S., and ISIS, a mutation of Al-Qaeda Islamic radicalism, has controlled, or does control, large swathes of territory and major cities in Iraq and Syria.<sup>56</sup> In Afghanistan, the Taliban remains a powerful entity, ISIS is attempting to gain a foothold, the government is fragile and fraught with contentious high-level relationships, and the 2015 spring fighting season was the bloodiest fighting season since 2001.<sup>57</sup> Critics can lay all these consequences at the feet of commanders and staffs who produced ineffective plans based on flawed understanding.

#### CURRENT SERVICE PME AND JPME

The Chairman of the Joint Chiefs of Staff Instruction (CJCSI) for officer development education policy provides joint education guidance for all levels of service PME. The first level of PME that builds from joint education guidance is the primary level PME. Primary level PME targets the junior O3 rank to prepare officers for O3 level command and staff positions.<sup>58</sup> Primary

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<sup>55</sup> Anthony H. Cordesman, “Afghanistan: The Death of a Strategy,” *Center for Strategic and International Studies*, 27 February 2012, <http://csis.org/publication/afghanistan-death-strategy> (accessed 19 December 2015).

<sup>56</sup> David C. Gompert, Hans Binnendijk, Bonny Lin, “The Iraq War: Bush’s Biggest Blunder,” *Newsweek*, 25 December 2014, <http://www.newsweek.com/iraq-war-bushs-biggest-blunder-294411> (accessed 23 January 2016).

<sup>57</sup> Vanda Felbab-Brown, “Blood and Hope in Afghanistan: A June 2015 Update,” *Brookings*, 26 May 2015, <http://www.brookings.edu/research/papers/2015/05/26-isis-taliban-afghanistan-felbabbrown> (accessed 23 January 2016).

<sup>58</sup> U.S. Joint Chiefs of Staff, J7, *CJCSI 1800.01E*, A-A-1 – A-A-5.

level learning areas include joint warfare fundamentals and the profession of arms, and also joint campaigning.<sup>59</sup>

The next level of PME that provides for focused joint education is at the intermediate level (ILE) for all services. This level targets the junior O4 rank population to prepare officers for field grade staff and General Officer staff positions.<sup>60</sup> The services' courses that provide intermediate level PME are at the Army Command and General Staff School, the Air Command and Staff College, the College of Naval Command and Staff, and the Marine Corps Command and Staff College, and authorized equivalent schools. All programs must achieve minimum requirements to ensure officers achieve JPME level I credit. To do so, according to the CJCSI for officer PME policy, programs must achieve prescribed joint learning objectives that "expand student understanding of Joint Matters from a Service component perspective at the operational and tactical levels of war."<sup>61</sup> Learning areas include national military capabilities strategy, joint doctrine and concepts, joint and multinational forces at the operational level of war, joint planning and execution processes, and joint operational leadership and the profession of arms.<sup>62</sup>

There are two noteworthy points found in this CJCSI regarding JPME I. First is the level of learning that the services must achieve. For nearly all the learning objective areas students must "comprehend" the subject matter.<sup>63</sup> To comprehend, students must the meaning of the material and information.<sup>64</sup>

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<sup>59</sup> Ibid., E-B-2 – E-B-3.

<sup>60</sup> Ibid., A-A-1 – A-A-5.

<sup>61</sup> Ibid., E-C-1.

<sup>62</sup> Ibid., E-C-1 – E-C-3.

<sup>63</sup> Ibid.

<sup>64</sup> Definition of comprehend based on the definition using Boom's Taxonomy found in CJCSI. Ibid, E-A-1.

Of course the degree to which students comprehend the learning objectives will vary based on the approach to teaching, which lends itself to the second noteworthy point. That is, services have flexibility in how they execute the broad joint course requirements. Specifically, the CJCSI states that, “PME institutions will base their curriculums on their parent Service’s needs...” and that “JPME-1 will not be delivered as a stand-alone course; they must be integrated across a diverse array of academic topics (e.g. history, economics, political science) and, where appropriate, in conjunction with Service PME.”<sup>65</sup> To ensure programs effectively achieve the goals of JPME, the CJCS accredits each program on a 6-year cycle.<sup>66</sup> However, given the flexibility of the programs to teach JPME I, students’ exposure to joint education and experience will vary widely.

Following the services’ intermediate level PME officers, and after volunteering for competitive selection, some officers will continue their education at an advanced operational planner program. Such programs are the Army’s School of Advanced Military Studies<sup>67</sup> (SAMS), the Air Force’s School of Advanced Air and Space Studies (SAASS), the Navy’s Maritime Advanced Warfighting School (MAWS), and the Marine Corps’ School of Advanced Warfighting (SAW). The CJCS does not accredit any of these advanced operational planner schools and there are no joint educational requirements within the CJCSI for Officer PME to guide joint education

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<sup>65</sup> Ibid., B-1.

<sup>66</sup> Ibid., F-2.

<sup>67</sup> U.S. Army Combined Arms Center, “School of Advanced Military Studies (SAMS),” U.S. Army Command and General Staff College, <http://usacac.army.mil/organizations/cace/cgsc/sams> (accessed 09 January 2016). This thesis refers to students that graduate from the Advanced Military Studies Program (AMSP) as SAMS graduates given propensity in the armed forces to use the SAMS description. The AMSP is the technically correct name of the program. The AMSP is one of three programs that the U.S. Army organizes under SAMS, and SAMS is organized under the U.S. Army Command and General Staff College.



or experience. However, all of the services' advanced planners programs include some level of joint education.

The Army SAMS program includes study of joint doctrine, Joint Task Force operations, air and sea operations, and the application of national elements of power. The Army produces SAMS graduates with an ability to develop solutions to operational problems using Joint, Interagency, Intergovernmental, and Multinational (JIIM) approaches. While there is no joint practicum, exercises will normally include JIIM components. Upon graduation, all officers will serve on division, corps, or Army Service Component Command (ASCC) staff positions.<sup>68</sup>

The Air Force SAASS program lacks joint education and experience more than the other services. It does cover general military history and military theories and their modern application to air, space, and cyberspace power. SAASS graduates have the ability to articulate how modern military force and its airpower component best apply across the spectrum of conflict.<sup>69</sup> While the curriculum lacks a joint flavor, SAASS does help rectify the shortfall through an exercise called the Theater Campaign Warfare (TCW). Students from SAASS, SAMS, MAWS and SAW all participate. Objectives of the war game include a greater cross-service appreciation of joint, strategic, and operational level war-fighting issues and an opportunity for synthesis of the concepts of employing a joint force.<sup>70</sup>

The Navy MAWS course includes many joint doctrinal concepts. According to the course catalog, MAWS imparts significant naval and joint operational planning knowledge to

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<sup>68</sup>U.S. Army Training and Doctrine Command, Command and General Staff College, *350-1 Command and General Staff College Course Catalog*, (Fort Leavenworth, KS: U.S. Army TRADOC, 2014), 67-69.

<sup>69</sup> U.S. Air Force Air University, *The 2015-2016 Air University Catalog* (Maxwell Air Force Base, AL: Air University Press, 2015), 35-36.

<sup>70</sup> Ibid., 16.

“specifically selected Navy and other service officers for subsequent assignments to Numbered Fleet, Navy Component Fleet Commander, Joint Component and CCMD staffs.”<sup>71</sup> MAWS graduates are educated to conduct multinational, interagency, joint, and maritime planning. As electives, MAWS students are educated in national security affairs, strategy and war, and joint maritime operations.<sup>72</sup>

The Marine Corps describes its SAW program as a “problem solving and decision making course, rather than a planning course, although planning is used as a vehicle for study and preparation.”<sup>73</sup> The SAW program covers joint concepts and doctrine, however, it does focus this portion of the curriculum on the employment of the Marine Air-Ground Task Force (MAGTF). The Marine Corps assigns SAW graduates to Marine Expeditionary Force level or higher headquarters, to include joint and multinational positions.

There are some important common features across all the services’ advanced operational planner programs. All services select their students using a best-qualified officer basis of those that volunteer. All services maintain the goal to produce graduates that are potential strategic leaders, critical thinkers, and advanced problem solvers. Lastly, all services assign their graduates to headquarters that operate at the tactical-operational or the operational level of war.

At the senior level of education, officers primarily receive their JPME II training from the service colleges, and the National Defense University (NDU). The senior level targets the senior

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<sup>71</sup> U.S. Navy War College, Course Catalog for 2015/2016, [www.usnwc.edu](http://www.usnwc.edu), AY 2015-2016, “MAWS,” [https://www.usnwc.edu/Academics/Catalog/RightsideLinks-\(1\)/2015-2016.aspx#MAWS](https://www.usnwc.edu/Academics/Catalog/RightsideLinks-(1)/2015-2016.aspx#MAWS) (accessed 23 January 2016).

<sup>72</sup> Ibid.

<sup>73</sup> U.S. Marine Corps, “U.S. Marine Corps School Of Advanced Warfighting”, last modified 2016, <http://www.mcu.usmc.mil>. (accessed 24 January 2016).

O5 and junior O6 rank population to prepare officers for senior military service.<sup>74</sup> Like the intermediate level of PME and JPME I, the senior level education programs must meet the CJCSI learning objective area requirements, and the CJCS accredits and recertifies them every six years. Learning areas for the services include; national security strategy, national planning systems and processes; joint warfare, theater strategy and campaigning in a JIIM environment; integration of JIIM capabilities; and joint strategic leadership. Also like JPME I, the CJCSI allows for flexibility in teaching the learning areas but emphasizes the importance of attaining both joint and service expertise and warfighting skills.<sup>75</sup>

Of all the senior level PME programs, the Joint Advanced Warfighting School (JAWS) stands out as the only school that the CJCSI charges with producing joint planners. It states, “JAWS focuses on the military art and science of planning, preparing, and executing campaign plans for joint, interagency, international, and multinational participants across the full range of military operations.”<sup>76</sup> Learning areas for JAWS are: national security strategy, systems, processes, and capabilities; defense strategy, military strategy, joint operations concepts; theater strategy and campaigning with JIIM assets; joint planning and execution processes; characteristics and conduct of the future joint force; and joint strategic leadership.<sup>77</sup>

Common to all the senior level PME programs, the colleges integrate the learning area objectives as they deem best, which will inevitably include exercises that include JIIM components, either in part or as a whole. However, there is no requirement for a joint practicum outside of in-course exercises that are included as part of the core curriculum.

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<sup>74</sup> U.S. Joint Chiefs of Staff, J7, *CJCSI 1800.01E*, A-A-1 – A-A-5.

<sup>75</sup> *Ibid.*, E-E-1.

<sup>76</sup> *Ibid.*, E-I-1.

<sup>77</sup> *Ibid.*, E-I-1 – E-I-4.

## **Educating and Developing Planners: An Overview**

This section briefly analyzes the military PME systems that currently exist from the intermediate level of PME to the senior level. The programs have their own unique strengths, but all have some weaknesses. There are only a few options for officers who seek operational planner skills. The first opportunity is at the O4 field grade level during intermediate level PME. These programs seek to meet the basic requirements to educate an officer to serve at higher levels of headquarters and with greater responsibilities. Officers achieve JPME I education but there is no effort to produce more capable joint planners.

The next opportunity is for graduates of intermediate level PME programs to attend a service advanced operational planners course (SAMS, SAASS, MAWS, SAW), which provides them with a deeper understanding of operational art and science, problem solving, and planning. These programs include JIIM concepts within their curriculum; however, there is no standard set by the CJCS defining what level of joint education to achieve, so there is no uniform joint capability across the services. Also, the focus of training and education remains within the program's service; outside of exercises, there is no joint practicum; and graduates will generally fill billets within their respective service upon graduation.

The last opportunity to develop an advanced operational planner is at the senior level PME, which resides within the Department of Defense (DoD) Senior Service Colleges. Much like intermediate level, SSCs fill the requirements for JPME II but only JAWS focuses on training and educating an advanced operational planner. Unlike the service advanced operational planner programs at the intermediate level PME, JAWS does not have a rigorous selection process for

attendance.<sup>78</sup> The PME system lacks the necessary flexibility to produce planners who are better prepared to assume the responsibility of planning and advising commanders in a world of increasing complexity.

An advanced operational planning gap exists between our current military PME and current global realities that every CCMD faces today. The DoD must fill the gap in a more effective way. This demand calls for a joint master operational planner.

### **The Joint Master Operational Planner**

Anticipating the demands of future armed conflict requires an understanding of continuities in the nature of war as well as an appreciation for changes in the character of armed conflict.<sup>79</sup> – U.S. Army Operating Concept, 2014.

The Joint Master Operational Planner (JMOP) would fill the aforementioned gap in planning capability that exists between the demands of a complex world and the operational planner produced by the current military PME system. The JMOP would negate the criticism of some senior defense officials and strategic level experts who suggest that military planning focuses on the wrong problems, fails to properly account for resources, does not adequately account for risk, is cumbersome and slow, and is often one dimensional and linear thinking. To address these criticisms this chapter will identify the attributes of the JMOP, and the education and training structure to develop the JMOP.

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<sup>78</sup> Each service of the Armed Forces selects officers that will attend JAWS.

<sup>79</sup> U.S. Army Training and Doctrine Command, *The U.S. Army Operating Concept: Win in a Complex World*, (Washington DC: Department of the Army, 31 October 2014), 8.

## PORTRAIT OF THE JMOP

The figure below captures the overall picture of the Joint Master Operational Planner.

This overall portrait provides the framework in which the DoD can build an educational program that will produce the best military thinkers of the future.

PORTRAIT OF THE JMOP			
ATTRIBUTES	SYNTHESIZES	EVALUATES	CREATES
Critical thinker	Strategic – operational context and environment	How to effectively build strategic – operational planning teams	Contributes to theory/philosophy
Design thinker			Helps shape policy
Expert problem solver	Strategic – operational and operational level of war	How to match operational objectives to strategic goals	Strategic Mindsets
Operational environment analyst			Strategic-Operational solutions
Strategic Thinker	Strategic – operational doctrine	How to effectively employ the JIIM force	Well understood and effective JIIM architectures
Operational Artist	Trends in modern war, warfare, and sub-war	The application of the art of command	Effective campaign and operational level plans
		How to anticipate changes in the operational environments	Mentors future strategic-operational leaders

*Figure 1: Portrait of the JMOP*

## ATTRIBUTES OF A JOINT MASTER OPERATIONAL PLANNER

There are six attributes that comprise a JMOP. A JMOP is a critical thinker, a design thinker, an expert problem solver, an operational environment analyst, a strategic thinker, and an

operational artist. These attributes complement one another to provide the kind of expertise needed to guide commanders and staffs in operational level headquarters.

### **Critical Thinker**

The JMOP is a trained critical thinker who has developed critical thinking skills. Although current service PME emphasizes critical thinking at all levels of an officer's career, it falls short of what is necessary. Most services train critical thinking based on a single text titled "How to Study and Learn: A Discipline in Critical Thinking Concepts and Tools," a reference publication very familiar to officers in every service. The instructional period is normally perfunctory.<sup>80</sup>

The JMOP is educated in a manner that devotes the proper time and effort to learning critical thinking. It is a difficult and complicated process, a process described by some leading scholars in the field as akin to the time and effort necessary to learn a second language.<sup>81</sup> The importance of developing this skill cannot be overstated. It is critical thinking that allows a planner to avoid following patterns or succumbing to groupthink.<sup>82</sup> A trained critical thinker is also able to break out of natural human instincts of how to think. These instincts drive the untrained planner to fall prey to cognitive biases, heuristics, and blind spots. One of the most prevalent of these is belief preservation, which is the instinct to cling to preconceived notions and beliefs despite evidence that portrays a contrary view.<sup>83</sup> Critical thinking arms a planner with the

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<sup>80</sup> BG David A. Fastabend and Mr. Robert H. Simpson, "Adapt or Die" The Imperative for a Culture of Innovation in the United States Army," *Army Magazine*, February 2004, 9. The authors state, "Most Army schools open with the standard bromide: 'We are not going to teach you what to think ... we are going to teach you how to think.' They rarely do. Critical thinking is both art and science."

<sup>81</sup> Tim van Gelder, "Teaching Critical Thinking: Some Lessons from Cognitive Science," *College Teaching*, 53, no. 1 (Winter 2005): 42.

<sup>82</sup> Fastabend, "Adapt or Die", 9.

<sup>83</sup> Gelder, 45-46.

ability to think differently about a problem, and provide solutions that attack the problem from another perspective and provides problem definition and a foundation for problem solution.

## **Design Thinker**

Design directly contributes to the JMOP's ability to thrive in complex environments. Design thinking in the military found its place first in the U.S. Army, adopted due to "a recognition that commanders and staffs had difficulty understanding complex situations."<sup>84</sup> It is not just the military that is using design thinking to deal with complexity. It is gaining acceptance throughout the business world as well, helping corporations to develop sound strategies and deal with complexity. According to Harvard Business Review, "This new approach is in large part a response to the increasing complexity of modern technology and modern business."<sup>85</sup>

Design gives the JMOP the ability to provide structure to environments, where there is little to no structure, in a non-linear way. Planners normally consider problem environments with no structure volatile, uncertain, complex, and ambiguous (VUCA) environments. Providing structure leads to an enhanced understanding of the VUCA environment, and the ability to determine possible outcomes as JIIM forces operate within that environment. The design process is iterative, and over time, planners improve the frames used to portray the environments as commanders and staff achieve enhanced understanding.

The JMOP, using design thinking, is able to translate new understanding into sound planning methodologies that follow, to include development of operational approaches and campaign plans. Design thinking provides planners the ability to modify campaign plans and

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<sup>84</sup> U.S. Army Training and Doctrine Command, *ATP 5-0.1, Army Design Methodology (ADM)*, (Washington DC: Dept of the Army, 01 July 2015), v.

<sup>85</sup> Jon Kolko, "Design Thinking Comes of Age," *Harvard Business Review*, September 2015, 68.



operational approaches as the depicted environment, created and iteratively improved upon, matures and helps to identify changes and opportunities in the environment.

### **Expert Problem Solver**

Education and training immerses the JMOP in a variety of problem solving methodologies that the JMOP can then apply to a specific type of problem. This expertise includes both service and joint methodologies, as well as a number of non-traditional and non-military methodologies. This problem solving education provides better ways to identify and solve problems, applying multiple options at the operational level.

Education in cognitive processes is part of this knowledge of problem solving. Cognitive study includes how humans think, to include intuition, inductive reasoning, deductive reasoning, thinking by analogy, thinking by association, and analytical thinking. Additional problem solving education, based on the foundation of cognitive study includes root cause analysis, gestalt problem solving, mind mapping, deconstruction, value engineering, and simulations.

### **Operational Environment Analyst**

The JMOP is an expert in analyzing and appreciating the strategic-operational environment. Training, education, and experience develops this expertise through an exposure to a broader base of knowledge in areas of inquiry such as psychology, sociology, economics, and political science. Another subject of study includes the conduct of post-modern warfare and sub-war to identify trends in regions and gain an appreciation for the characteristics of what is now new wars. The JMOP will become more adept at understanding the strategic-operational environment by gaining a regional expertise allowing the JMOP to continuously build upon this understanding over time.

## **Strategic Thinker**

The JMOP is educated to think strategically and is conversant at the strategic level with strategic civilian leaders. The JMOP understands strategic and policy level processes and strategic implications regarding national security. The JMOP is able to define strategic ends, articulate strategy, develop strategic approaches, and anticipate strategic outcomes. JMOPs build the foundation for this ability on understanding of policy, strategy, and the implementation of strategy in subsequent operational level campaigns and operations.

The JMOP is able to comprehend the actions and interests of strategic leaders, analyze particular strategic courses of action, and articulate how those actions affect the strategic environment. At the CCMD level, the JMOP is able to make sense of strategic decision making and also able to provide commanders with advice on how to manage best strategic courses of action and the implications of implementation. They are also able to advise commanders on approaches that are essential to a strategic level dialogue.

## **Operational Artist**

The JMOP understands the operational level of war and operational art. The JMOP is able to take the complexity of the environment and translate it to meaningful, but simple frames that accurately depict the operational environment, correctly identify the problem, and develop sound operational approaches. JMOPs will represent the next evolution in the application of operational art. They conduct and participate in operational art from new perspectives, with increased levels of understanding, leading to more executable, more comprehensive, and more decisive operational approaches. An immersion in the practical application of the operational level of war indoctrinates this mastery. This includes a deep understanding of doctrine and doctrinal

processes, but at the same time, they are adept at operational design and creating operational approaches using both doctrinal and non-doctrinal techniques.

## OPPORTUNITIES AND CHALLENGES FOR DEVELOPMENT

The education and training of the JMOP is potentially a daunting task, but far from impossible. Revisions to both service and joint PME programs would be necessary and there would be a requirement for faculty expertise, funding, and other resources. However, it is not necessary to design the JMOP program as a stand-alone program that replaces current primary, intermediate, and senior level PME education. Creating a JMOP program would require leveraging current programs, maximizing efficiencies, and minimizing redundancies.

The first opportunity that exists rests in the primary level of PME for all the services. The opportunity is to tap into all the service primary PME schools to identify and recruit the best talent early for the JMOP program. While all of those identified will not make it through the JMOP program, it is nevertheless necessary to look for talent early.<sup>86</sup> Those officers identified as the best talent would attend a JMOP orientation course immediately following completion of primary PME.

The next opportunity is at the intermediate level of education. Potential officers will attend ILE as prescribed by their service. It is at the advanced operational planner courses that the JMOP program finds opportunity. Already competitively selective, there is a built-in method for

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<sup>86</sup> It is early talent identification and management that makes other organizations successful. Major League Baseball begins looking for talent at age 15-16 years old, knowing that only a small percentage will actually play in the majors. Frank Marcos, Major League Baseball, "Major League Baseball Scouting Bureau Q&A," Major League Baseball Scouting Bureau. [http://mlb.mlb.com/mlb/official\\_info/about\\_mlb/scouting\\_overview.jsp](http://mlb.mlb.com/mlb/official_info/about_mlb/scouting_overview.jsp) (accessed 24 January 2016).

identifying best talent. Presumably, many officers selected for the JMOP orientation course will desire to continue along that career path and compete for attendance at one of the services' advanced operational planner programs. JMOP administrators will then work with the faculty of advanced operational planner programs to identify those that will proceed to the next level of JMOP education and training. Those officers identified would attend a JMOP indoctrination course immediately following completion of their advanced operational planner course.

The two aforementioned opportunities identify talent, and, as an addendum to existing courses, earn attendance to continue JMOP education. The final course would require a fundamental change in the JAWS SSC. Attendance at any SSC college is already competitive; however, selection for attendance to JAWS SSC would be limited to only graduates of the JMOP indoctrination course. Additionally, the JAWS SSC would extend by a period of twelve months to 23 months to allow for a sufficient amount of time to achieve an operational level mastery of all subjects that build the six attributes of a JMOP. JAWS would serve as the home of the JMOP program, and in doing so, would also become the DoD's intellectual center for operational planning, joint operations, and strategic-operational thought.

There are challenges associated with instituting such a program. The first, and most obvious, is resources. Although the JMOP program gains significant efficiencies by leveraging existing PME and not instituting a stand-alone program, it will still require funding for assignment and permanent change of station (PCS) to JAWS for orientation and indoctrination course, funding to extend the JAWS program, and funding to acquire additional military and civilian professors, other faculty, and facilities.

Another challenge is that currently, there is no prescribed guidance for inclusion of joint matters at the advanced operational planners programs. To execute the JMOP program properly,

the CJCS would need to seek authority, and then provide guidance to the services, to ensure that service advanced operational planner programs teach a minimum level of joint matters so the JMOP program delivers a consistent student competency. Additionally, some services assign advanced operational planner program graduates to only service headquarters, while others assign officers to joint headquarters, but still have a need to assign to service headquarters. The JMOP program alleviates this concern by allowing services to continue to assign graduates as the service needs see fit, understanding that these assignments work to develop JMOP program students towards becoming a JMOP upon completion of JAWS.

### EDUCATING AND TRAINING THE JMOP

The JMOP program will span the vast majority of a selected officer's career in an iterative learning and experience cycle. The design of the JMOP program affords the opportunity for officers to broaden within their service and command when eligible and selected. The focus of the program is at the primary, intermediate, and senior levels of education and builds upon existing programs at the primary and intermediate levels. The orientation program extends primary education by 6 weeks, and intermediate education by 6 months. It culminates at the JAWS SSC, in a two-year program. Each level of PME, primary, intermediate, and senior, represent a defined phase of training. Figure 2 depicts the basic career path of the officer in the JMOP program and graphically portrays the available officer population that will compete and from which JMOP program administrators will choose the best-qualified officers.

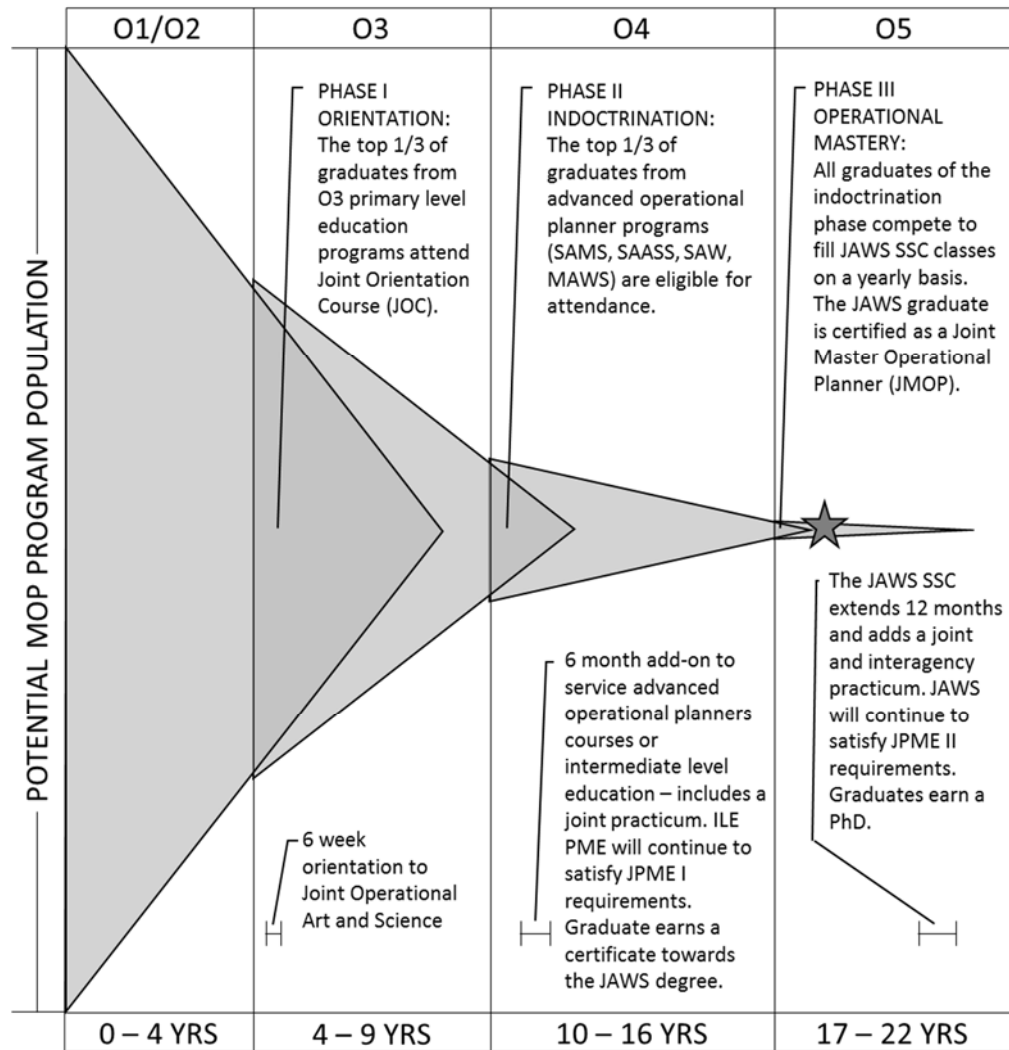


Figure 2: Career Path of a JMOP Program Officer

The JMOP program curriculum incorporates identified learning areas to produce the JMOP at the completion of the JAWS program. The JMOP program teaches these learning areas to students in the JMOP program at an increased speed to advance students in their knowledge and understanding in joint matters and planning earlier in their career. This ensures the JAWS SSC has the time to focus on highly sophisticated concepts and learning area objectives. Advancing JMOP program students' knowledge earlier in their career is possible by adding a six

week focused JMOP orientation to the primary level PME, and adding a six month focused JMOP indoctrination to the intermediate level PME. Figure 3 depicts each phase and the learning areas for education for the JMOP program officer.

EDUCATION PHASES OF THE JMOP PROGRAM		
PHASE I O3 PRIMARY LEVEL ORIENTATION (6 Weeks)	PHASE II O4 INTERMEDIATE LEVEL INDOCTRINATION (6 Months*)	PHASE III O5 SENIOR LEVEL OPERATIONAL MASTERY (JAWS) (2 Years**)
Introduction to MOP program	Comprehension of theater strategy and campaigning	Immersion in national strategy and practicum
Introduction to national security processes	General instruction in psychology, sociology, economics, political science	International relations theory
Joint doctrinal concepts	Critical and design thinking	Advanced strategic concepts
DoD services organization and capabilities	New wars trends	Advanced problem solving concepts and techniques
Global and regional national security orientation	Application of joint doctrine	Application of design in civilian and military environments
Global environment trends	Regional instruction in psychology, sociology, economics, culture, political science, history	Advanced language training include immersion
Critical thinking	Language education and training	Employment of joint forces in complex environments
	Non-doctrinal problem solving concepts and techniques	Regional environment immersion – study and practicum
	Joint practicum	Evaluation of current warfare and new wars trends
		Employment and conduct of the future force

\*following one year of an advanced operational planners program. (SAMS, SAASS, MAWS, SAW)

\*\*time encompasses an expanded JAWS program from one to two years in duration.

*Figure 3: Education Phases of the JMOP*

## JMOP Orientation

The orientation phase of the JMOP program begins upon completion of primary level PME at the grade of O3. Selection for JMOP orientation is limited to the top one-third of students

graduating from primary PME and attendance is mandatory. The orientation phase begins with an introduction to the JMOP program. Not only does the introduction provide information about what it means to become a JMOP, it also serves as a recruiting mechanism to attract the best-qualified and best thinkers to endeavor to complete the JMOP program. The orientation also begins with an overview of National Security processes, to include how the United States develops strategy at the national level, and how the interagency contributes to the formulation of strategy and policy.

Orientation also provides basic education in a number of learning areas. This includes instruction in the global strategic environment, strategic implications of the current environment, and regional security studies organized within the geographic combatant command (GCC) framework. It provides instruction in joint concepts that intermediate level PME programs would ordinarily teach. These joint concepts build upon the service concepts provided before orientation during primary PME core curriculum, such as service planning processes and employment of forces. (See Figure 4.)



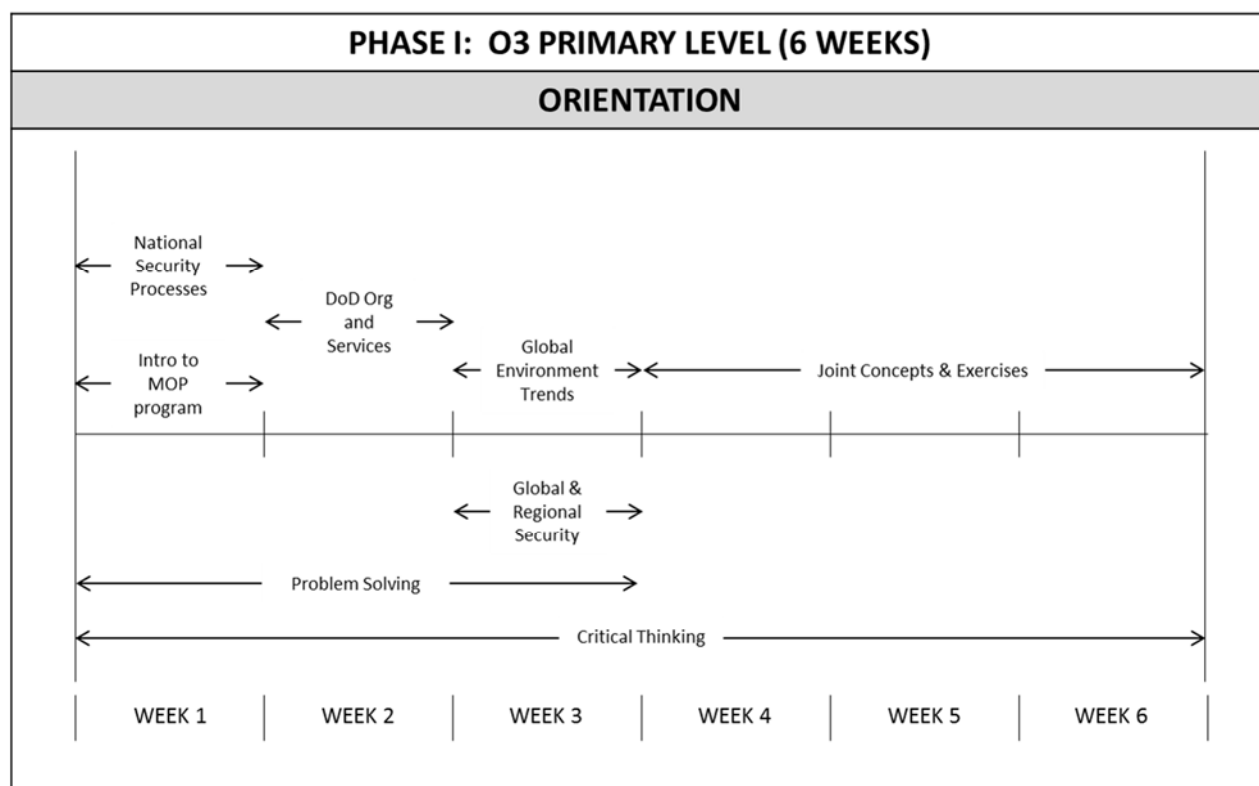


Figure 4: JMOP Orientation Phase

## JMOP Indoctrination

The first great leap in advancing education towards producing a JMOP begins with the indoctrination phase. It is also the phase that will receive the most resistance due to the necessary changes in PME for proper implementation. It is important to bear in mind that to produce a planner that possesses a mastery in strategic-operational thinking, major changes are required. As stated by Eliot Cohen, the DoD's current PME programs:

...do not create an elite cadre of strategic thinkers and planners from all the services and the civilian world. To do that, measures would have to be taken that would be anathema to personnel systems today: competitive application to attend a school, rather an assignment to do so as a kind of reward; extremely small class sizes; no foreign presence, or only that of our closest allies; work on projects that are directly relevant to existing war planning problems.<sup>87</sup>

<sup>87</sup> Eliot Cohen, Global challenges, October 22, 2015.

It is at the indoctrination phase that the JMOP program begins to address Professor Cohen's major concerns.

Indoctrination begins with selection. Essentially, there are three gates a potential student must pass through to continue in the JMOP program. First, services must select the student for resident intermediate level education at Army Command and General Staff School, Air Force Command and Staff College, College of Naval Command and Staff, or Marine Corps Command and Staff College. Next, students must apply, and the services competitively select, students from the intermediate level programs for attendance at service advanced operational planner programs (SAMS, SAASS, MAWS, SAW). From the advanced operational planner programs, JAWS selects the top one-third of graduates to continue in the JMOP program and into the JMOP indoctrination phase.

At the beginning of the indoctrination phase, the study begins in the discipline of critical thinking and introduces new PME learning areas that broaden the student in a way that current PME lacks. Specifically, the program begins a tailored study in the fields of psychology, sociology, economics, and political science. Following completion, the program regionally aligns students using the same framework as the CCMDs. This alignment also marks the beginning of language and culture training. After the general course of study in the previously mentioned topics, the curriculum then focuses the student in the same learning areas but within the students' regional alignment and adds history and warfare trends. During the regionally focused instruction, students also study and apply design and problem solving.

The indoctrination phase builds on concepts and teaching from advanced operational planner programs, but elevates instruction to the strategic and strategic-operational level and joint

doctrine. The joint doctrine learning area includes operational design, JOPP, and employment of the joint force. The program culminates with a regionally aligned practicum that will place students in the J5 of a CCMD, and optimally includes a period of immersion in the language and environment. Upon graduation, the National Defense University, through JAWS, awards a certificate of completion that gives educational credit towards the JAWS SSC degree. Upon completion the services would then assign officers to best meet its needs. Officers do not incur a joint service obligation by attending the JMOP indoctrination phase. (See Figure 5.)

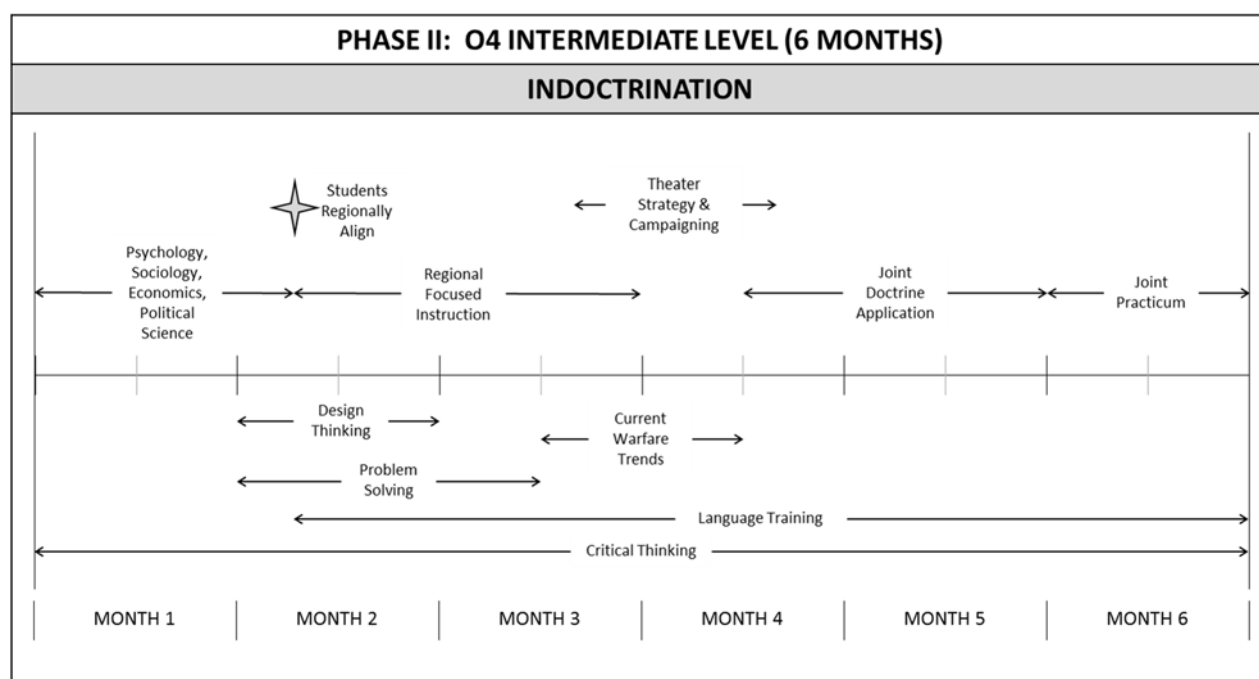


Figure 5: JMOP Indoctrination Phase

## JMOP JAWS

The final phase of the JMOP program achieves a mastery level of operational planning and strategic-operational thinking. This phase expands the JAWS SSC into a two-year curriculum, which sets it apart from the rest of the SSC catalog. Like the other phases, the JAWS phase begins with selection. Unlike other SSCs, JAWS will select from the best-qualified JMOP

program population competing for SSC. JAWS will accept approximately 40 students with the goal to proportionally represent the services, and the additional goal of producing approximately 40 students that successfully complete JAWS and the JMOP program per annum.

The JAWS phase begins with history, both general history to synthesize concepts of the strategic and operational levels of war, and also a regionally aligned study in history, for the same purpose but focused in the student's assigned regional area of concentration. Using history as a foundation, the phase transitions to a study in international relations, and students will analyze past and current relationships between countries, and other global sources of power, and evaluate the subsequent implications of actors' actions. The next phase would involve a concentrated study in national security strategy and a national level practicum at a U.S. embassy within the student's regional alignment.

Moving from history and strategic level learning areas, the JAWS student then enters into a course of instruction on advanced problem solving techniques and application of design in today's complex environment. Students will then apply learning areas to regional studies, to include evaluation of warfare trends. Students will apply non-doctrinal problem solving to their regionally aligned areas after choosing a problem to study and evaluate. This study and evaluation will transition into a regional practicum, where the student will present solutions to a regional problem within their aligned CCMD or U.S. embassy.

The JAWS students then enter into an intensive period of study and application of employing joint forces in a complex environment. This period of study includes an exhaustive examination of the friendly and adversary military organizations within their regional alignment to attain a deep understanding of how to properly employ friendly multinational forces and counter adversary forces. This period of study will finish with a capstone exercise. Whenever

possible, this capstone exercise will align with a major CCMD exercise to best leverage the capability of the pre-graduate JMOP and best hone the skills of the student.

The JAWS phase culminates with a dedicated four-month in-depth study in a research area chosen by the student. The research area will encompass a topic that contributes to national strategy, international relations, the interagency, the DoD, or any other topic subject to approval by the JAWS faculty. The student will then defend their thesis in front of a panel of faculty chosen by their knowledge in the student's area of research. (See Figure 6.)

Upon completion of the JAWS phase, the National Defense University awards graduates with a Doctor of Philosophy degree in Strategy and Operational Art. The graduates' assignment officers will manage JMOPs through the rest of their career with the JMOP qualification as an assignment consideration. JAWS graduates will continue to receive assignments that fulfill requirements by law to assume positions designated on the Joint Duty Assignment List (JDAL). Their joint service obligation will also continue unchanged, remaining as prescribed in the Joint Qualification System (JQS).

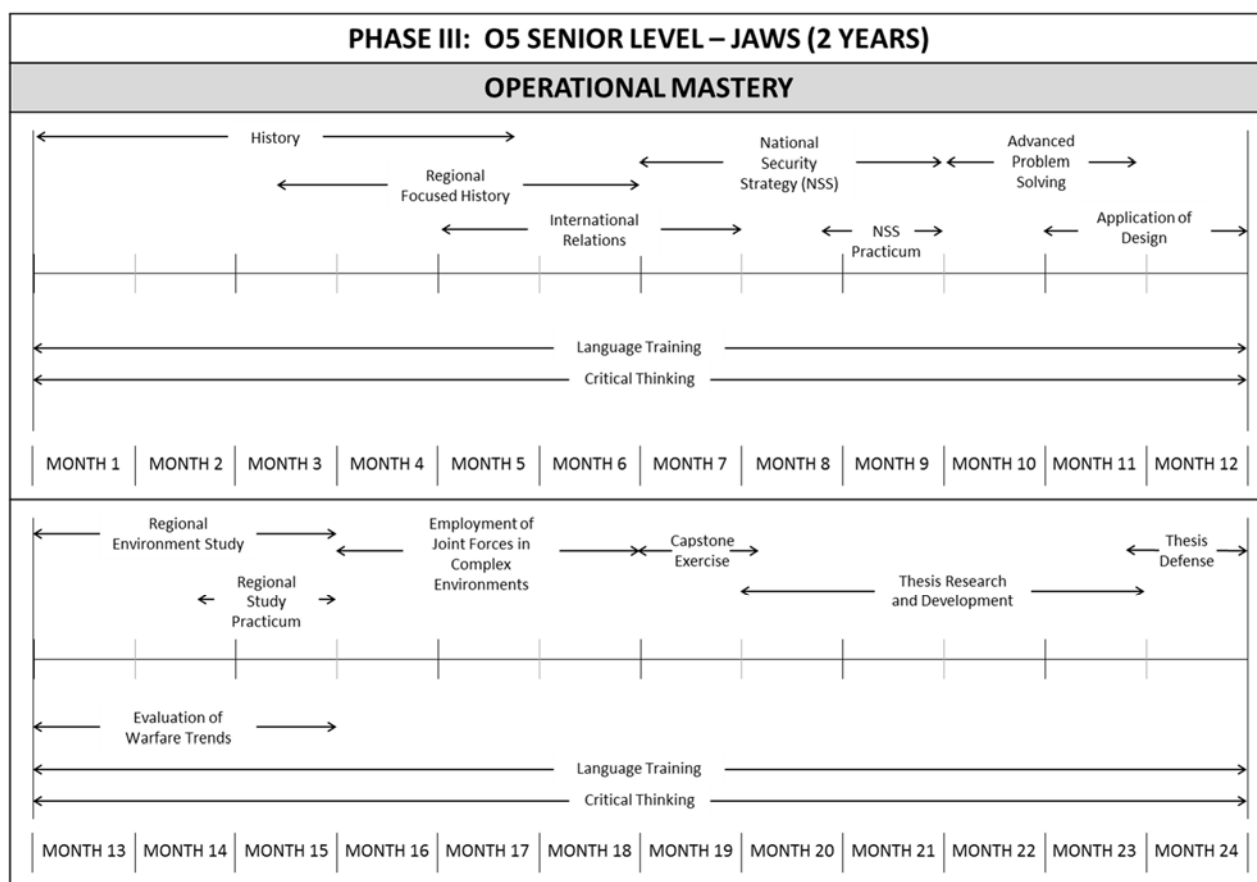


Figure 6: JMOP JAWS Phase

## The JMOP Community

The JMOP community will serve as a center of excellence for strategic-operational thought and the operational level of war. Beginning with orientation, students will gain access to resources that provide opportunities to enhance learning, training, and experience while in attendance at a JMOP phase, and also between phases. These resources will propel students forward in their continued self-development and disciplined study of all past and future learning areas.

JAWS will make resources necessary to facilitate a student's journey through the JMOP program. Resources will include current articles, books, and strategic leader communication that allows students to remain current and relevant in the strategic-operational environment.

Resources will also include opportunities for additional experience by posting temporary and permanent job, exercise, and writing opportunities within CCMD geographic areas of responsibility. JAWS will make available conferences, symposiums, and temporary training and education opportunities that are short in duration so students are absent from their current assignment for only a brief amount of time. Most importantly, JAWS will manage a mentorship program that pairs students from all phases with each other and with a Joint Master Operational Planner program graduate.

### **Recommendations**

The DoD has an opportunity to improve its ability to produce great strategic thinkers who have exceptional planning skills at the joint level. To do so, the DoD must make revisions to the current education system, moving away from a system that broadly selects talent to fulfill requirements for promotion and advancement, and towards a system that recognizes the best talent and molds that talent into a cadre of strategic-operational thinkers and planners.

The JMOP program will require resources, but it does not have to be exhaustive in terms of funding, personnel, and facilities. The JMOP program does not need to be a stand-alone program that replaces current PME. Instead, the DoD can enhance current PME, and make changes that leverage current PME institutions to minimize costs and find efficiencies in training and educating the JMOP program officer.

These changes begin at the primary level PME. Guidance for the core curriculum can largely remain the same, but the DoD must resource a faculty, as part of JAWS, that is able to receive rotations of primary level PME graduates for a focused joint orientation. The next change necessary is to provide joint education guidance to the services' advanced operational planners

programs. This guidance will not cause a major upheaval in the services' already well-designed programs. The purpose of the guidance is to provide a consistent level of joint competency as students transition from their advanced operational planners program and into the JMOP indoctrination phase of education. The DoD will also need to resource a faculty to administer the JMOP indoctrination program that can teach the indoctrination curriculum on a six-month rotational basis.

The final change required targets the SSC program and the JAWS SSC. The DoD must make attendance to the JAWS SSC a competitive selection, limiting attendance to the top performing graduates of service advanced operational planner programs, to fill approximately forty slots a year. In addition, the JAWS SSC must expand to a two-year program to provide the necessary time to accommodate a more in-depth and rigorous academic program. Doing so guarantees that the JMOP receives all necessary education and training in the final phase, and the CCMD headquarters will receive a thinker and planner that delivers on all expectations.

### **Conclusion**

The world is complex, and it is growing in complexity every day. As a result there are shifts in sources of power moving away from state institutions and into the hands of people. The people that rule include terrorist organizations, warlords, and criminal organizations; they all compete for, and are empowered by, control over resources. Those resources include money, territory, food, water, oil, diamonds, or drugs, to name a few. The world is entering an age of diminished nation-state power, and an era where, despite where lines are drawn on a map, other non-state people and organizations rule above all in many areas, particularly in the Middle East and Africa. The age of classic state vs. state warfare is over. The modern era that brought total



war, fought on fields of battle, have seen their last days. The comfortable Clausewitzian theory on war is no longer universally applicable in the face of post-modern realities. The emergence of new conflicts is revealing a trend that belligerents do not fight with tanks and bombers, they more often fight with AK-47s and machetes. Human security will be paramount. It will require better-trained and educated thinkers and planners to adapt in such environments and to create effective strategic-operational plans.

Current PME systems, effective in producing a highly professional and educated officer corps, do not produce an elite cadre of thinkers and planners. The DoD goal is to educate officers to a similar level of competency, and to qualify officers for the next rank or position. The current PME system does nothing to identify the best talent, and the best-qualified officers, and does not manage that smaller group of officers through a more rigorous and challenging program of education. The services' advanced operational planner programs are exceptional in producing a better educated officer, but there is no joint guidance to manage the education of joint matters, so each services' graduating officer has a different level of preparation and capability to operate in a JIIM environment. JAWS SSC stands out as the program that best produces an above-average operational planner for employment at a CCMD, but there are many ways to improve the overall quality of the graduate as a thinker and planner.

The United States has fallen short in reacting to changing times. Its poor strategic assessments have led to poorly developed plans that could not meet unrealistic strategic objectives. The U.S. was slow to change strategy and planning in Iraq and Afghanistan. Better problem solving and planning at the strategic-operational level is essential if the United States is to retain its position in the world, and protect its interests and those of United States' friends, partners, and allies.

To improve the overall quality, a comprehensive, long-term approach to developing the thinker and planner is necessary. It begins with changing officer PME to achieve the portrait of the Joint Master Operational Planner, which includes six attributes: a JMOP is a critical thinker, design thinker, expert problem solver, operational environment analyst, strategic thinker, and operational artist. The best opportunity to develop a JMOP is to leverage existing PME systems and add a JMOP orientation phase to primary level PME, a JMOP indoctrination phase to intermediate level PME, and expand the JAWS SSC to a two-year program. Boards and faculty assessments select only the best officers to attend the JMOP program phases of education from within the available service's population at each phase of JMOP education and training.

The product of the JMOP program is an exceptional thinker and planner at the strategic-operational level. The JMOP is an indispensable part of any staff and planning team. From the time of arrival at an operational level headquarters, they are able to provide value-added input and feedback about the operational environment and are ready to enter discourse and discussion with other members of the planning team, other members of staff, and the commander. As the hub of the JMOP program, JAWS SSC becomes the intellectual center of gravity for strategic-operational thought, change, and improving the military. The JMOP community forms an elite cadre that fills the current intellectual gap within the DoD, able to quickly assess strategic-operational environments and able to advise the best decision-making and strategies. The JMOP community produces the next generation of thinkers, writers, and theorists that contribute to ensuring that the United States is able to intelligently pursue its national security objectives in the future, despite a changing and increasingly complex global environment.

## APPENDIX 1

### Bloom's Taxonomy

To provide a construct for the levels of learning that services and schools must achieve, the CJCSI uses "Bloom's Taxonomy." This taxonomy provides a framework of learning levels to help educators develop curriculums. (See Figure 7.) According to Bloom's Taxonomy, learning achievement for the primary level PME is on the lower end of the hierarchy, with seven of the 16 learning area objectives at Level I, and nine of the 16 learning area objectives at Level II. Comprehension, a Level II level of learning, comprises the majority of the learning area objectives for the intermediate level of education. Of the 31 objective learning areas only five require learning levels above Level II. At the senior level PME, of the 20 learning area objectives, three are Level II, one is Level III, thirteen are Level IV, one is Level V, and two are Level VI on Bloom's Taxonomy of learning.

BLOOM'S TAXONOMY – COGNITIVE DOMAIN					
LEVEL	DESCRIPTION	DEFINITION	LEVEL	DESCRIPTION	DEFINITION
I	Knowledge	Remembering previously learned information	V	Synthesis	Rearranging component ideas into a new whole
II	Comprehension	Grasping the meaning of information	VI	Evaluating	Making judgments based on internal evidence or external criteria
III	Application	Applying knowledge to actual situations	VII	Creating	Building a structure or patter from diverse elements
IV	Analysis	Breaking down objects or ideas into simpler parts and seeing how the parts relate and are organized			

Figure 7: Bloom's Taxonomy<sup>88</sup>

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<sup>88</sup> Ibid., E-A-1 – E-A-2. Figure is a condensed version of the table in the CJCSI.

## **APPENDIX 2**

### **Towards a New Taxonomy**

By designing the JMOP program as described, there is a change in the Bloom's Taxonomy of learning depicted in the CJCSI officer professional development education policy. The change is that it shifts the learning to earlier periods of PME. The JMOP program teaches learning areas, previously introduced at the intermediate level of PME, at the primary level of PME. The program teaches learning areas previously introduced at the senior level of PME, at the intermediate level of PME. Not only are they introduced earlier, the program teaches them during a concentrated period of study allowing the learning levels in Bloom's Taxonomy to climb to higher levels. This also provides the time and space necessary at JAWS to introduce new learning areas and continue to climb the learning hierarchy of Bloom's taxonomy.

Figure 8 provides a graphical depiction of this advancement of learning. The graph on the left depicts the current joint learning levels, calculated by taking the weighted averages of each learning level and graphically displaying them. The figure on the right depicts the learning levels that the JMOP program can achieve by advancing learning levels as described in the JMOP program.



## **Key Terms**

Complexity

Campaign Plan

Combatant Command (CCMD)

Combined

Coalition

Joint

Joint Advanced Warfighting School (JAWS)

Joint Officer Development (JOD)

Joint Professional Military Education (JPME)

Joint Task Force (JTF)

Operational

Professional Military Education (PME)

Senior Service College (SSC)

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## **Vita**

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LTC Hibner is a graduate of the Master Fitness Trainer Course, Engineer Officer Basic and Advanced Courses, the Basic Motor Officer Course, the Combined Arms and Services Staff School, the Command and General Staff School, and the School of Advanced Military Studies. He holds a Bachelor of Science in Construction Management from Purdue University, a Master in Military Arts and Science from the School of Advanced Military Studies, and a Master of Science in Engineering Management from the Missouri University of Science and Technology.

His awards and decorations include the Silver Star, the Purple Heart, the Bronze star (3 OLC), the Army Meritorious Service Medal (2 OLC), the Army Commendation Medal (3 OLC), the Army Achievement Medal, Iraq Campaign Medal (SSD), the Afghanistan Campaign Medal (BSD), Kosovo Campaign Medal, the Meritorious Unit Citation, the Army Superior Unit Citation, the Ranger Tab, the Expert Infantryman Badge, the Basic Parachutist Badge, the Air Assault Badge, and the Bronze Order of the de Fleury Medal.